

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
13 November 2003 (13.11.2003)

PCT

(10) International Publication Number  
**WO 03/093613 A2**

(51) International Patent Classification<sup>7</sup>: **E05B 47/00**

(21) International Application Number: PCT/GB03/01767

(22) International Filing Date: 25 April 2003 (25.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0209824.2 30 April 2002 (30.04.2002) GB

(71) Applicant (for all designated States except US): **SUTTON GOLDSMITH ASSOCIATES LIMITED** [GB/GB]; Unit 7, Ilavens Head Business Park, Milford Haven, Pembrokeshire SA73 3LD (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SUTTON, Patrick, Richard** [GB/GB]; Brynhowel, Wiseman's Bridge, Saundersfoot, Pembrokeshire SA69 9AU (GB). **GOLD-SMITH, Geoffrey, Neil** [GB/GB]; 177, Robert Street, Milford Haven, Pembrokeshire SA73 2HS (GB).

(74) Agent: **STRACHAN, Victoria, Jaue**; Urquhart-Dykes & Lord, Alexandra House, 1 Alexandra Road, Swansea SA1 5ED (GB).

(81) Designated States (national): AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SECURITY SYSTEM

(57) Abstract: An electronic access control system comprising a lock cylinder and one or more user keys for use in operating the lock. Housed within the lock cylinder is a microprocessor and a memory. Each user key has an ID chip in which is embedded (at the time of manufacture) a unique ID number drawn from a pool of greater than 280,000,000,000,000 combinations, which number cannot be changed once it has been embedded in the key. A user key can be used to successfully open the lock if its unique ID number has been added to a list stored in the lock memory. The system further comprises an edit key which can be used to add or delete ID numbers of user keys from the list of valid keys stored in the lock memory.

WO 03/093613 A2

BEST AVAILABLE COPY

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB 03/01767

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G07C9/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"OPENING UP A NEW WORLD OF KEY-BASED SECURITY LOCKING" DESIGN ENGINEERING, MORGAN-GRAMPIAN LTD. LONDON, GB, 1 April 1993 (1993-04-01), page 23 XP000363906 ISSN: 0308-8448 figures 1,2 column 1, paragraphs 2-6 column 2, paragraph 2 column 3, paragraph 1 column 4, paragraph 4	1-18
X	US 5 508 691 A (LYNX ROGER ET AL) 16 April 1996 (1996-04-16) abstract; figures 2-6 column 3, line 53 -column 5, line 6 -/-	1-18

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

18 November 2003

Date of mailing of the international search report

02/12/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5816 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel: (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Höhn, M

## INTERNATIONAL SEARCH REPORT

Internat      lication No

PCT/GB 03/01767

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 704 352 A (HONDA MOTOR CO LTD) 3 April 1996 (1996-04-03) abstract; figures 1,2,12A-12D column 2, line 51 -column 3, line 31 -----	1-18
X	EP 0 695 675 A (MAZDA MOTOR ;NALDEC KK (JP)) 7 February 1996 (1996-02-07) abstract; figure 11 column 1, line 32 -column 6, line 44 -----	1-18

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

BEST AVAILABLE COPY

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/01767

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5508691	A	16-04-1996	NONE
EP 0704352	A	03-04-1996	JP 3005175 B2 31-01-2000
			JP 8150903 A 11-06-1996
			AU 681539 B2 28-08-1997
			AU 3294995 A 02-05-1996
			DE 69508509 D1 29-04-1999
			DE 69508509 T2 12-08-1999
			EP 0704352 A1 03-04-1996
			US 5621380 A 15-04-1997
EP 0695675	A	07-02-1996	JP 3441177 B2 25-08-2003
			JP 8040206 A 13-02-1996
			DE 69512721 D1 18-11-1999
			DE 69512721 T2 02-03-2000
			EP 0695675 A1 07-02-1996
			US 6008722 A 28-12-1999

Form PCT/ISA/210 (patent family annex) (July 1992)

BEST AVAILABLE COPY